



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

# SCIENCE

---

A WEEKLY JOURNAL DEVOTED TO THE ADVANCEMENT OF SCIENCE, PUBLISH-  
ING THE OFFICIAL NOTICES AND PROCEEDINGS OF THE AMERICAN  
ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

---

EDITORIAL COMMITTEE: S. NEWCOMB, Mathematics; R. S. WOODWARD, Mechanics; E. C. PICKERING,  
Astronomy; T. C. MENDENHALL, Physics; R. H. THURSTON, Engineering; IRA REMSEN, Chemistry;  
CHARLES D. WALCOTT, Geology; W. M. DAVIS, Physiography; HENRY F. OSBORN, Paleontology;  
W. K. BROOKS, C. HART MERRIAM, Zoology; S. H. SCUDDER, Entomology; C. E. BESSEY,  
N. L. BRITTON, Botany; C. S. MINOT, Embryology, Histology; H. P. ROWDITCH,  
Physiology; J. S. BILLINGS, Hygiene; WILLIAM H. WELCH, Pathology;  
J. McKEEN CATTELL, Psychology; J. W. POWELL, Anthropology.

NEW SERIES. VOLUME XIV.

JULY-DECEMBER, 1901.

---

NEW YORK  
THE MACMILLAN COMPANY  
1901

---

THE NEW ERA PRINTING COMPANY,  
41 NORTH QUEEN STREET,  
LANCASTER, PA.

---

# CONTENTS AND INDEX.

N. S. VOL. XIV.—JULY TO DECEMBER, 1901.

*The Names of Contributors are Printed in Small Capitals.*

- ABBE, C., Cannonade against Hail Storms, 738  
 Acoustics, Progress in, JAMES LOUDON, 987  
 Agricultural, Colleges, American, Assoc. of, A. C. TRUE, 883; Chemists, Official, H. W. WILEY, 997  
 Agriculture, Secretary's Annual Report, 954  
 Alaska, W. J. M., 807  
 'Albatross,' Work of the, F. A. L., 899  
 ALLEN, E. W., Agricultural Bacteriology, H. W. Conn, 1001; The Feeding of Animals, W. H. Jordan, 1002  
 ALLEN, G. M., Boston Soc. of Nat. Hist, 1010  
 American Association for the Advancement of Science, 59, 74, 108, 156, 185, 188, 233, 255, 297, 305, 315, 345, 348, 357, 360, 375, 385, 393, 444, 474, 482, 492, 527, 545, 585, 596, 602, 625, 658, 705, 717, 745, 785, 794, 800, 801, 912, 965, 970, 984  
 AMT, H. M., Royal Society of Canada, 111  
 Anopheles Punctipennis and Culex Pipiens, G. W. HERRICK, 329  
 Antarctic Expedition, British, National, 94  
 Anthropological Society of Washington, W. HOUGH, 936, 1005  
 Anthropology, at the American Association, 297; G. G. MACCURDY, 717; at University of California, 619; and Psychology at the N. Y. Acad. Sci., R. S. Woodworth, 934, 971; Current Questions in, W. J. M., 996  
 Archeological Publication, New, H. I. SMITH, 300  
 Astigmatic Images of the Bottom of Pool, F. E. NIPHER, 855  
 Astronomical Science, Advances in, C. L. DOOLITTLE, 1  
 Astrophysical Observatory of the Smithsonian Institution, C. E. MENDENHALL, 407  
 Atkinson, E., Ganot's Natural Philosophy, W. LE C. STEVENS, 257  
 B., F. A., Patagonian Personalities, 693  
 B., G. F., Centroid of a Quadrangle, 696  
 B., H. C., Smithsonian Institution Documents, W. J. Rhees, 931  
 BAIN, S. M., Fungicides and Peach Foliage, 221  
 BANKS, N., Notes on Entomology, 977  
 BARUS, C., Stability of Vibrations, 403; The Hittorf Jubilee, 897  
 BASKERVILLE, C., A Basis of Scientific Thought, 165; Elisha Mitchell Scientific Society, 615, 813  
 BATHER, F. A., Geologic Distribution of Pollicipes and Scalpellum, 112  
 Bather, F. A., on Echinoderma, C. E. BEECHER, 844  
 BEAL, W. H., Physics of Agriculture, F. H. King, 1002  
 BEATTIE, W. R., Hydrocyanic Acid Gas in Extermination of Household Insects, 285  
 Beaufort Laboratory, H. V. WILSON, 739  
 BEECHER, C. E., Bather on Echinoderma, 844  
 Bergey, D. H., Hygiene, G. M. KOBER, 727  
 Bernadou, J. B., Smokeless Powder, C. E. MUNROE, 767  
 BESSEY, C. E., Botanical Notes, 72, 331, 938; A Botanist's Journey to the Denver Meeting of the A. A. A. S., 185; Coulter and Chamberlain's Morphology of Spermatophytes; Chamberlain's Methods in Plant Histology, 260; Ganong and MacDougall on Plant Physiology, 494; Early Winter Colors of Plant Formations, 721; Britton's Flora of the Northern States and Canada, 732  
 BESSEY, JR., C. E., Botany at the American Association, 596  
 Bibliographical Research, A. G. S. JOSEPHSON, 615  
 Bibliography, A. G. S. JOSEPHSON, 535  
 BIGGS, H. M., Malarial Fever, 266  
 Bigourdan's Système métrique, T. C. MENDENHALL, 143  
 Biological, Society of Washington, T. W. STANTON, 849; F. A. LUCAS, 895, 1007; Survey of Great Lakes, J. REIGHARD, 34  
 Birds, Song in, W. E. D. SCOTT, 522  
 BUGERT, M. T., Les plantes tinctoriales, Les matières colorantes naturelles, V. Thomas, 278, 846  
 BOLTON, H. C., Christian Friederich Schönbein, 689; Del Mar's History of the Precious Metals, 893  
 Bornstein, R., Leitfaden der Wetterkunde, H. H. CLAYTON, 651  
 Boston Soc. Nat. Hist., G. M. ALLEN, 1010  
 Botanical, Notes, C. E. BESSEY, 72, 331, 938; Work Committee, 136; Society in America, D. T. MACDOUGAL, 526; Seminar, Univ. of Nebraska, 775  
 Botanists' Journey to the Denver Meeting of the A. A. A. S., C. E. BESSEY, 185  
 Botany, Systematic, Problems and Possibilities of, B. L. ROBINSON, 465; at the American Association, C. E. BESSEY, JR., 596  
 BRANNER, J. C., Travertine Falls and Reefs, 184  
 BRASHEAR, J. A., Carnegie Technical School, 385  
 BRITCHER, H. W., Onondaga Academy of Sci., 149  
 British Association for the Advancement of Science, Approaching Meeting of, 376; Address of the President, A. W. RÜCKER, 425; Address of President of Physiological Section, J. G. MCKENDRICK, 517, 539; and President McKinley, 580; Address of President of Anthropological Section, J. D. CUNNINGHAM, 603, 640; Glasgow Meeting, J. P. McMURRICH, 633, 682; A. L. ROTCH, 757  
 Britton, N. L., Flora of Northern States and Canada, C. E. BESSEY, 732  
 Brontosaurus, H. B. HATCHER, 1015  
 Bumpus, H. C., Lobster Culture, 1013  
 BURGESS, E. S., The Torrey Botanical Club, 69, 850, 935, 971  
 BUTLER, A. W., Notable Factor in Social Degeneration, 444

- C., E. F., Packard's History of Medicine, 769  
 C., T. D. A., Las Vegas Science Club, 1009  
 CAJORI, F., Deviation of Falling Bodies, 853  
 Calendar of Societies and Academies, 894, 933  
 Calkins, G. N., The Protozoa, W. M. WHEELER, 808  
 Carnegie Technical School, 41, 656; J. A. BRASHEAR, 385  
 Catalase, A New Enzyme, D. W. MAY, 815  
 Catalogue, International, of Scientific Literature, T. WILLIAMS, 328  
 CATTELL, J. MCK., Visual Perception of Space, 263; Washington Memorial Institution and a National University, 574  
 Centroid of a Quadrangle, G. F. B., 696  
 Chamberlain, on the Functions of a University, 226  
 Chamberlain's Methods in Plant Histology, C. E. BESSEY, 260  
 CHAMBERLAIN, A. F., Ameliorations of English Grammar, 814  
 Chemical, Society, American, N. Y. Section, D. WOODMAN, 30; J. A. MATHEWS, 692, 1007; Northeastern Section, H. FAY, 1008; Denver, Meeting, A. C. HALE, 154; Laboratory, Harvard, 36  
 Chemistry, Teaching, in Schools, R. P. WILLIAMS, 100; In Medical Schools of the U. S., J. H. LONG, 360; at the American Association, W. MCPHERSON, 482; Inorganic, Notes on, J. L. H., 536, 696, 855  
 Chester's Bacteriology, H. W. CONN, 967  
 Chicago University, Conferring Degrees, 73; Field Work in Botany, Geology and Zoology, 459  
 CHILD, C. M., Zoological Club, University of Chicago, 28  
 Clark, W. B., Allegany County, Maryland, G. W. STOSE, 181  
 CLARKE, J. M., Maryland Eocene Book, 27  
 CLAYTON, H. H., Leitfaden der Wetterkunde, R. Bornstein, 651; Air Pressure and the Pulse, 6; 6 Cliff Dwellings, Colorado, H. I. SMITH, 333  
 COCKERELL, T. D. A., Horned Lizard, 111  
 COLE, F. N., American Mathematical Society, 375, 772  
 Color, Vision, Ebbinghaus's Theory of, C. L. FRANKLIN, 30; of Plant Formations, C. E. BESSEY, 721  
 Columbia University, Resignation of the President, 656  
 COMSTOCK, G. C., Astronomischer Jahresbericht, W. F. Wislicenus, 216  
 Comstock, G. C., Astronomy, S. D. TOWNLEY, 612  
 CONN, H. W., Chester's Determinative Bacteriology, 967  
 Conn, H. W., Agricultural Bacteriology, E. W. ALLEN, 1001  
 Connecticut Rivers, W. H. HOBBS, 1011  
 CONRADI, A. F., Toads killed by Squash-bugs, 816  
 Convocation Week, Report of the Committee on, C. S. MINOT, R. S. WOODWARD, E. L. NICHOLS, L. O. HOWARD, J. MCK. CATTELL, 984  
 Corals, Bahaman, T. W. VAUGHAN, 491  
 Coulter and Chamberlain's Morphology of Spermatophytes, C. E. BESSEY, 260  
 COULTER, J. M., Proceedings of American Association, 348  
 CRAMPTON, H. E., Biology at the N. Y. Academy of Sciences, 109  
 CROES, J. J. R., A Century of Civil Engineering, 83  
 CUNNINGHAM, J. D., Address of President of Anthropological Section of British Association, 603, 640  
 DAVENPORT, C. B., Zoology of the Twentieth Century, 315  
 DAVIS, W. M., Current Notes on Physiography, 70, 152, 222, 299, 457, 537, 617, 698, 778, 856, 975  
 DEARBORN, G. V. N., Psychology and the Medical School, 129  
 Degeneration, Social, A. W. BUTLER, 444  
 Del Mar's History of the Precious Metals, H. C. BOLTON, 893  
 Deviation of Falling Bodies, F. CAJORI, 853  
 DEXTER, E. G., Success at School, 248  
 Discord, M. MEYER, 328, 616; W. LE C. STEVENS, 455, 654  
 Discussion and Correspondence, 30, 111, 150, 183, 220, 263, 326, 412, 455, 496, 534, 573, 615, 654, 693, 735, 775, 814, 852, 896, 936, 973, 1011  
 Doctorates, conferred by American Universities, 161; at the University of Pennsylvania, 333  
 DODGE, R. E., Geology and Mineralogy at the N. Y. Academy of Science, 773  
 Doflein, F., Zell und Protoplasmastudien, 454  
 DOOLITTLE, C. L., Astronomical Science during Nineteenth Century, 1  
 Douglass, Andrew Ellicott, H. I. SMITH, 570  
 Dubois, R., Physiology, G. N. I. S., 324  
 Earthquake, Japanese, Investigations, T. C. MENDENHALL, 178.  
 Eclipse, Total, of the Sun, S. A. MITCHELL, 802  
 Eddyman's X-Ray Work, A. W. GOODSPEED 965  
 Education, Change of Front, C. M. WOODWARD, 474  
 Electro-chemical, American, Society, 818  
 Elisha Mitchell Scientific Society, C. BASKERVILLE, 615, 813  
 Elliot, D. G., Mammals of North America, G. S. MILLER, JR., 25  
 Engineering, Civil, a Century of, J. J. R. CROES, 83; Education, F. O. MARVIN, 121; in London, 289; Steam, R. H. THURSTON, 810  
 Entomology, Magazine, J. B. SMITH, 456; M. McCULLOCH-WILLIAMS and J. B. S., 776; Notes on, N. BANKS, 977  
 F., A. K., Wild Birds, F. H. HERRICK, 326  
 FAY, H., Am. Chem. Soc., Northeastern Section, 1008  
 Fellows of American Association, 527  
 FERNOW, B. E., Subjects and Titles in Colleges, 654  
 Fish, Fauna of Japan, D. S. JORDAN, 545; Largest Deep-sea, T. GILL and C. H. TOWNSEND, 937  
 Fishes, Distribution of, D. S. JORDAN, 936; A. E. ORTMANN, 694  
 FISKE, T. S., Forsyth's Functions of a Complex Variable, 533  
 Forestry, New Bureau of, 115; Association, American, 188  
 Forsyth's Functions of a Complex Variable, T. S. FISKE, 533  
 FOWKE, G., Preglacial Drainage of Southwestern Ohio, 936  
 FOX, W. J., Unknown Works of Rafinesque, 498, 617  
 Fraas on Aqueous vs. Aeolian Deposition of the White River Oligocene of S. D., 210  
 FRANKLIN, C. L., Color-vision, 30  
 FRANKLIN, W. S., Atoms and Energies, D. A. MURRAY, 295; Weather Control, 496  
 Frazer, P., Bibliotics, R. S. WOODWORTH, 291  
 French Association for the Advancement of Science, 540  
 Frost, W. D., Bacteriology, E. O. J., 65

- Fuertes, on Water Filtration, F. E. TURNEAURE, 573  
Fungicides, Injury to Peach Foliage, S. M. BAIN, 221  
Fusarium Equinum, V. A. NÖVGAARD, 898  
Fürbringer, M., Reptiles, O. P. HAY, 180
- G., S. H., Animal Life, D. S. JORDAN and V. L. KELLOGG, 147  
Ganong's Plant Physiology, C. E. BESSEY, 494  
GAUS, H. S., 'Is Larvæ Contagious?' 152  
Geography, Physical, Relation to other Sciences, W. H. NORTON, 205  
Geologic Distribution of Pollicipes and Scalpellum, F. A. BATHER, 112  
Geological, Explorations at Pikermi, 268; Society of America, 979  
Geology, of Ore Deposits, C. R. VAN HISE, 745, 785; and Geography at the American Association, H. B. PATTON, 794  
Geometry, Non-Euclidean, G. B. HALSTED, 705  
German Congress, Impressions of, 298  
GERMANN, G. B., Graduate Courses in Science, 413  
Giglio-Tos, Les problèmes de la vie, J. P. McM., 63  
GILL, T., and C. H. TOWNSEND, Largest Deep sea Fish, 937  
GILMAN, D. C., Relations of Yale University to Letters and Science, 665  
Glasgow University, Jubilee of, 34  
GOODSPEED, A. W., Eddyman's X-Ray Work, 965  
Grammar, English, Ameliorations of, A. F. CHAMBERLAIN, 814  
GRATACAP, L. P., Formative Museum Period, 168  
GREENHILL, A. G., Mathematical Theory of the Top, 973
- H., J. L., Inorganic Chemistry, 536, 696, 855, 1018  
HADDON, A. C., Permanent Skin Decoration, 897  
Hail Storms, Cannonade against, C. ABBE, 738  
HALE, A. C., American Chemical Society, 154  
HALLOCK, W., Larynx an Instrument of Music, 150  
HALSTED, G. B., Non-Euclidean Geometry, 705  
Hann's Meteorology, R. DEC. WARD, 966  
Harrington, C., Practical Hygiene, G. M. KOBER, 727  
Hasluck on Taxidermy, F. A. L., 292  
HATCHER, H. B., Brontosaurus, 1015  
HAY, O. P., Reptiles, M. Fürbringer 180  
Henderson, C. H., and J. F. Woodhull, Elements of Physics, W. LE C. STEVENS, 257  
HENDERSON, Y., Jaffe's Festschrift, 1003  
HERRICK, C. J., Brain of Acipenser, J. B. JOHNSTON, 930  
Herrick, F. H., Home Life of Wild Birds, A. K. F., 326  
HERRICK, G. W., Anopheles Punctipennis and Culex Pipiens, 329  
HILL, R. T., Coast Prairie of Texas, 326; Sacramento Forest, 739  
Hirsch, Joseph, R. H. THURSTON, 927  
Hittorf Jubilee, C. BARUS, 897  
Hoadley, G. A., Physics, W. LE C. STEVENS, 257  
HOBBS, W. H., Connecticut Rivers, 1011  
Hoskins, L. M., Theoretical Mechanics, R. S. W., 571  
Hot Stones, O. T. MASON, 897  
HOUGH, W., Anthropological Society of Washington, 936, 1005  
Howard, L. O., Mosquitoes, A. S. PACKARD, 218; The Insect Book, J. B. SMITH, 373  
HOYT, J. W., Proposed National University, 505  
Hydrocyanic Acid Gas for Extermination of Household Insects, W. R. BEATTIE, 285  
Industry and Research, 32  
J., E. O., de Bary on Bacteria, W. Migula, 65; Bacteriology, W. D. Frost, 65  
JACKSON, D. C., Dynamo Electric Machinery, S. Sheldon and H. Mason, 410  
JACOBY, H., Truman Henry Safford, 22  
Jaffe's Festschrift, Y. HENDERSON, 1003  
JAYNE, H., Anatomy of the Cat, J. Reighard and H. S. Jennings, 453  
JENNINGS, H. S., Vergleichende Anatomie der wirbellosen Thiere, A. Lang, 259  
JESSE, R. H., State University, 138  
Johnson, W., Theoretical Mechanics, R. S. W., 571  
Johnston, J. B., Brain of Acipenser, C. J. HERRICK, 930  
Joly, C. J., Hamilton's Elements of Quaternions, A. MACFARLANE, 65  
JORDAN, D. S., Fish Fauna of Japan, 545; Geographical Distribution of Fishes, 936  
Jordan, D. S., Geographical Distribution of Fishes, A. E. ORTMANN, 694; and V. L. Kellogg, Animal Life, S. H. G., 147  
Jordan, W. F., The Feeding of the Animals, E. W. ALLEN, 1002  
JOSEPHSON, A. G. S., School of Bibliography, 535; Institute for Bibliographical Research, 615  
KEYES, C. R., Zone of Maximum Richness in Ore Bodies, 577  
King, F. H., Physics of Agriculture, W. H. BEAL, 1002  
KINGSLEY, J. S., Origin of the Mammals, 193  
KOBER, G. M., Recent Books on Hygiene, 727  
Kobert's Wirbelthierblut in Mikrokristallographischer Hinsicht, L. B. MENDEL, 969  
Koenig, Rudolph, W. LE C. STEVENS, 724  
L., F. A., Museum Reports, 153, 499; Hasluck on Taxidermy, 292; Phylogeny of Toothed Whale, 618; Work of the 'Albatross,' 899; South African Museum, 940  
Lang, A., Vergleichende Anatomie der wirbellosen Thiere, H. S. JENNINGS, 259  
Larynx as an Instrument of Music, W. HALLOCK, 150; E. W. SCRIPTURE, 183  
LAWSON, A. C., Joseph Le Conte, 273  
Lawton, George K., T. J. J. SEE, 215  
Lazear, Jesse William, Memorial, 225  
Le Conte, Joseph, A. C. LAWSON, 273  
Leffmann, H., and W. Beam, Food Analysis, H. W. WILEY, 769  
LEITH, C. K., Sci. Club, Univ. Wisconsin, 972  
Library Association, American, 225  
Lizard, Horned, at High Altitude, T. D. A. COCKERELL, 111  
LLOYD, A. H., Unscientific Reflections upon Science, 13  
Lobster Culture, H. C. BUMPUS, 1013  
LONG, J. H., Teaching of Chemistry in Medical Schools of U. S., 360  
LOUDON, JAMES, A Century of Progress in Acoustics, 987  
LUCAS, F. A., Paleontological Notes, 376; Biological Society of Washington, 895, 1007  
Lühe, M., Sporozoenforschung, C. W. STILES, 106  
Lyons on Electromagnetic Phenomena, M. F. O'REILLY, 145  
M., L. B., Marcel Nencki, 889

- M., W. J., An American Senate of Science, 277 ;  
'Who's Who in America,' 651 ; Alaska, 807
- McM., J. P., Les problèmes de la vie, E. Giglio-Tos, 63 ; Fifth International Congress of Zoology, 405
- MCCULLOCH-WILLIAMS, M., and J. B. S., Magazine Entomology, 776
- MACCURDY, G. G., Anthropology at the American Association, 717
- MACDOUGAL, D. T., Botanical Society in America, 526 ; Pfeffer's Pflanzenphysiologie, 847
- MacDougal's Plant Physiology, C. E. BESSEY, 494
- MACFARLANE, A., Quarternions, C. J. Joly, 65
- MCGEE, W. J., Washington Memorial Institution, 111 ; Current Questions in Anthropology, 996
- McKENDRICK, J. G., Address before Physiological Section of British Association, 517
- McKinley, President, and British Association, 580
- McMURRICH, J. P., Glasgow Meeting of the British Association, 633, 682
- MCPHERSON, W., Chemistry at the American Association, 482
- Malarial, Fever, H. M. BIGGS, 266 ; Parasite, 297
- Mammalian, New, Genus, 114
- Mammals, Origin of the, J. S. KINGSLEY, 193
- MARVIN, F. O., Engineering Education, 121
- Maryland Eocene Book, J. M. CLARKE, 27
- MASON, O. T., Lifting Hot Stones, 897
- Mathematics and Astronomy at the American Association, G. A. MILLER, 393
- Mathematical Society, American, F. N. COLE, 772
- MATHEWS, J. A., N. Y. Section of Amer. Chem. Society, 692
- MAY, D. W., Lime and Magnesia in Plant Production, 31 ; Catalase, a New Enzyme, 815
- Mayo-Smith, Richmond, 900
- MELTZER, S. J., Overton über die Narcose, 845
- Membership of the American Association, 59, 255, 492, 602, 800, 965
- MENDEL, L. B., Professor Pawlow on the Physiology of Secretion, 647 ; Schulz's Krystallization von Eiweissstoffen, 691 ; Kobert's Wirbelthierblut in Mikrokristallographischer Hinsicht, 969
- MENDENHALL, C. E., Annals of the Astrophysical Observatory of the Smithsonian Institution, 407
- MENDENHALL, T. C., Bijourdan's Système métrique, 143 ; Japanese Earthquake Investigations, 178 ; Henry Augustus Rowland, 865
- MERRIMAN, M., Public Water Supplies, F. E. Turneaure, F. H. Russell, 104
- MERRITT, E., American Physical Society, 848
- Meteorological Observations with Kites at Sea, A. L. ROTCH, 896
- Meteorology, Current Notes, R. DEC. WARD, 33, 779, 817, 938 ; Kites in, A. L. ROTCH, 412
- MEYER, M., Discord, 328, 616
- Meyer's Studien über den Körperbau der Anneliden, E. B. WILSON, 889
- Michigan, Univ. of, Research Club, F. A. NEWCOMBE, 66
- Migula, W., de Bary's Vorlesungen über Bakterien, E. O. J., 65
- MILLER, A. M., Preglacial Drainage of Southwestern Ohio, 534
- MILLER, G. A., Mathematics and Astronomy at the American Association, 393
- MILLER, JR., G. S., Mammals of North America, D. G. Elliot, 25
- MINOT, C. S., Remarks of, at American Association, 357 ; Committee on Convocation Week, 984
- Missouri Univ. Scientific Association, C. THOM, 852
- MITCHELL, S. A., Total Eclipse of the Sun, 802
- MORGAN, T. H., Regeneration and Liability to Injury, 235
- MOSELEY, E. L., The Python in Pennsylvania, 852
- Mosquito Larvæ, Goldfish as Destroyers of, W. L. UNDERWOOD, 1018
- Mosso's La Democrazia, G. TOSTI, 293
- MUNROE, C. E., Bernadou on Smokeless Powder, 767
- Munson, E. L., Military Hygiene, G. M. KOBER, 727
- Murray, D. A., Atoms and Energies, W. S. FRANKLIN, 295
- Museum, Formative, Period, L. P. GRATACAP, 168 ; Reports, F. A. L., 153, 499
- Mutation, Varietal, C. A. WHITE, 841
- National. University, 45, 113 ; J. W. HOYT, 505 ; Academy of Sciences, 813
- Naturalists, American Society of, meeting in Chicago during Convocation Week, 905 ; Program, 980
- Naval Observatory, 819, 861, 945 ; Report of Board of Visitors, C. A. YOUNG, C. F. CHANDLER, A. HALL, JR., E. C. PICKERING, O. STONE, W. R. HARPER, 877 ; Report of Superintendent, 947
- Nencki, Marcel, L. B. M., 889
- NEWCOMBE, F. C., Research Club of Univ. of Michigan, 66
- NIPHER, F. E., Astigmatic Images of Bottom of Pool, 855
- New York, Academy of Sciences, Biology, H. E. CRAMPTON, 109 ; Astronomy, Physics and Chemistry, F. L. TUFTS, 614, 934 ; Anthropology and Psychology, R. S. WOODWORTH, 934, 971 ; Geology and Mineralogy, R. E. DODGE, 773 ; Botanical Garden, 460
- NORTON, W. H., Relation of Physical Geography to other Sciences, 205
- NÖVGAARD, V. A., Fusarium Equinum, 898
- NOYES, W. A., Roscoe-Schorlemmer's Chemie, 811 ; Remsen's Chemistry, 932
- NUTTING, C. C., Tierleben der Tiefsee, O. Seeliger, 998
- O., H. F., Recent Zoo-Paleontology, 330, 498, 578, 699
- Observatory, Naval, 819, 861, 945 ; Report of Board of Visitors, C. A. YOUNG, C. F. CHANDLER, A. HALL, JR., E. C. PICKERING, O. STONE, W. R. HARPER, 877 ; Report of Superintendent, 947
- Onondaga Academy of Science, H. W. BRITCHER, 149
- Ore Bodies, Zone of Maximum Richness, C. R. KEYES, 577
- O'REILLY, M. F., Lyons on Electromagnetic Phenomena, 145
- Ornithologists', American, Union, J. H. SAGE, 926
- ORTMANN, A. E., Jordan's Geographical Distribution of Fishes, 694
- OSBORN, H. F., Diplodocus Marsh, 531
- Overton über die Narcose, S. J. MELTZER, 845
- PACKARD, A. S., Mosquitoes, L. O. Howard, 218
- Packard, F. R., History of Medicine, E. F. C., 769
- Paleontological Notes, F. A. LUCAS, 376
- PARKER, G. H., Zoological Results, A. Willey, 106
- Parkes, L., Hygiene and Public Health, G. M. KOBER, 727
- Patagonian Personalities, F. A. B., 693
- Pathological Institute, New York, 657
- PATTON, H. B., Geology and Geography at the American Association, 794

- Pawlow, Professor, Researches on Physiology of Secretion, L. B. MENDEL, 647
- PEARSON, R. A., Social and Economic Science at the American Association, 912
- PEGRAM, G. B., Radio-active Substances, 53
- Pennsylvania University, Astronomical Publications, T. J. J. SEE, 891
- Persei, Nova, No. 2, E. C. PICKERING, 31
- Perseus, New Star in, 860
- Pfeffer's Pflanzenphysiologie, D. T. MACDOUGAL, 874
- Philosophical Society, American, 74; of Washington, C. K. WEAD, 894, 1006
- Phylogeny of Toothed Whale, F. A. L., 618
- Physical, Chemistry, J. H. VAN'T HOFF, 126; Quantities, Definitions of, F. SLATE, 538; Sciences at the British Association, A. L. ROTCH, 757; Society, American, E. MERRITT, 848
- Physics, at the Amer. Association, 108; J. ZELENY, 585
- Physiography, Current Notes on, W. M. DAVIS, 70, 152, 222, 299, 457, 537, 617, 698, 778, 856, 975
- Physiological Effects of Diminished Air Pressure, R. DEC. WARD, 814; H. H. CLAYTON, 696; W. UP-  
TON, 1012
- Physiology, Teaching, W. T. PORTER, 567
- PICKERING, E. C., Nova Persei, No. 2, 31
- Plant, Naming, Some Strange Practices in, C. L. POLLARD, 280; Production, Lime and Magnesia in, D. W. MAY, 31
- POLLARD, C. L., Plant Naming, 280
- PORTER, W. T., Teaching of Physiology, 567
- Porter's Physiology, G. N. I. S., 532
- Prairie, Coast, of Texas, R. T. HILL, 326
- Preglacial Drainage of S. W. Ohio, A. M. MILLER, 534; W. G. TIGHT, 775; G. FOWKE, 936
- President Roosevelt's Message, Extracts, 907
- Proceedings of Denver Meeting of American Association, J. M. COULTER, 348
- Pseudoscopic Vision, R. W. WOOD, 184; W. LE C. STEVENS, 220
- Psychology and the Medical School, G. V. N. DEARBORN, 129
- Pulse, Air-pressure on, H. H. CLAYTON, 696
- Python, in Pennsylvania, E. L. MOSELEY, 852
- Quotations, 32, 112, 297
- Rabot on Glaciers, H. F. REID, 928
- Radio-active Substances, G. B. PEGRAM, 53
- Rafinesque, Unknown Works of, W. J. FOX, 498, 617
- Railways, Government, in Europe, 301
- RANE, F. W., 'Professor of Agriculture,' 573
- Regeneration and Liability to Injury, T. H. MORGAN, 235
- REID, H. F., Rabot on Glaciers, 928
- REIGHARD, J., Biological Survey of Great Lakes, 34
- Reighard, J., and H. S. JENNINGS, Anatomy of the Cat, H. JAYNE, 453
- Remsen's Chemistry, W. A. NOYES, 932
- Rhees, W. J., Smithsonian Institution Documents, H. C. B., 931
- Rhizoctonia and the Potato, F. M. ROLFS, 899
- RICHARDS, T. W., Kent Chemical Laboratory, 372
- RITTER, W. E., Subsidence of Islands, 575
- ROBINSON, B. L., Systematic Botany, 465
- ROLFS, F. M., Rhizoctonia and the Potato, 899
- Roscoe-Schorlemmer's Chemie, W. A. NOYES, 811
- ROTCH, A. L., Kites in Meteorology, 412; Physical Sciences at the British Association, 757; Meteorological Observations with Kites at Sea, 896
- Rowland, Henry Augustus, T. C. MENDENHALL, 865
- Royal Society of Canada, H. M. AMI, 111
- RÜCKER, A. W., Address of President of British Association, 425
- S., G. N. I., Leçons de physiologie expérimentale, R. Dubois, 324; Porter's Physiology, 532
- Sacramento Forest, R. T. HILL, 739
- Safford, Truman Henry, H. JACOBY, 22
- SAGE, J. H., American Ornithologists' Union, 926
- St. Louis Academy of Science, W. TRELEASE, 70, 693, 813, 852
- School, Success at, E. G. DEXTER, 248
- Schönbein, Christian Friederich, H. C. BOLTON, 689
- Schott, Charles Anthony, I. WINSTON, 212
- SCOTT, W. E. D., Song in Birds, 522
- Schulz's Krystallisation von Eiweissstoffen, L. B. MENDEL, 691
- Schuster, A., and C. H. LEES, Practical Physics, W. LE C. STEVENS, 257
- Science, Unscientific Reflections upon, A. H. LLOYD, 13; and the Government, 112; The Progress of, R. S. WOODWARD, 305; Graduate Courses in, G. B. GERMANN, 413; Applied, Prize-subjects in, 420; Student's Society Exhibition, 740
- Scientific, Books, 25, 63, 104, 143, 178, 216, 257, 291, 324, 372, 407, 453, 494, 531, 571, 610, 649, 689, 727, 767, 807, 844, 889, 965, 998; Notes and News, 36, 75, 116, 157, 189, 227, 269, 301, 338, 378, 421, 461, 500, 541, 580, 620, 659, 701, 740, 780, 820, 861, 901, 940, 980, 1021; Journals and Articles, 107, 149, 182, 261, 296, 373, 455, 613, 652, 733, 771, 812, 847, 932, 969, 1005; Thought, a Basis of, C. BASKERVILLE, 165; Ornithology, 1013; Societies and Convocation Week, 1020
- SCRIPTURE, E. W., Larynx as a Musical Instrument, 183
- SEE, T. J. J., George K. Lawton, 215; Astronomical Publications of Univ. of Pennsylvania, 891
- Seeliger, O., Tierleben der Tiefsee, C. C. NUTTING, 998
- Senate of Science, American, W. J. M., 277
- Senegal Baobab Tree, C. A. WHITE, 937
- Shaw, E. R., School Hygiene, G. M. KOBER, 727
- Sheldon, S., and H. Mason, Dynamo Electric Machinery, D. C. JACKSON, 410
- Shorter Articles, 31, 112, 184, 221, 329, 538, 575, 696, 815, 853, 898, 937, 1013
- SIMONDS, F. W., Texas Academy of Science, 67, 1009
- Skin Decoration, Permanent, H. N. WARDLE, 776; A. C. HADDON, 897
- SLATE, F., Definitions of Physical Quantities, 538
- Slate, F., Principles of Mechanics, R. S. W., 571
- SMITH, H. I., A New Archeological Publication, 300; Preservation of Colorado Cliff Dwellings, 333; Andrew Ellicott Douglass, 570
- SMITH, J. B., The Insect Book, L. O. HOWARD, 373; Magazine Entomology, 456
- SMITH, L. S., Science Club, Univ. of Wisconsin, 851
- Snyder, W. H., and I. O. PALMER, Problems in Physics, W. LE C. STEVENS, 257
- Social and Economic Science at the American Association, R. A. PEARSON, 912
- Societies and Academies, 28, 66, 108, 149, 219, 297, 375, 614, 691, 772, 813, 848, 894, 933, 970, 1005
- South African Museum, F. A. L., 940
- Squash-bugs, Toads killed by, A. F. CONRADI, 816
- STANTON, T. W., Biological Society of Washington, 849



- Starr's Recent Work in Mexico, 227  
 State University, R. H. JESSE, 138  
 STEVENS, W. LE C., Pseudoscopic Vision, 220 ; Recent Books on Physics, 257 ; Discord and Psychology, 455, 654 ; Rudolph Koenig, 724  
 STILES, C. W., Sporozoenforschung, M. Lühe, 106  
 STOSE, G. W., Alleghany Co., Md., W. B. Clark, 181  
 STRATTON, S. W., Bureau of Standards, 1019  
 Subsidence of Islands, W. E. RITTER, 575
- Texas Academy of Science, F. W. SIMONDS, 67, 1069  
 Thermodynamics of Gas-engine, R. H. THURSTON, 859  
 THOM, C., Sci. Assoc., Univ. of Missouri, 852  
 Thomas, V., Les plantes tinctoriales ; Les matières colorantes naturelles, M. T. BOGERT, 218, 846  
 THORNDIKE, E. L., Adaptation in Vision, 221  
 THURSTON, R. H., Report of Bureau of Steam Engineering, 810 ; Thermodynamics of the Gas-engine, 859 ; Joseph Hirsch, 927  
 TIGHT, W. G., Preglacial Drainage in S. W. Ohio, 775  
 Titles in Colleges, B. E. FERNOW, 654  
 Top, Mathematical Theory of, A. G. GREENHILL, 975  
 Torrey Botanical Club, E. S. BURGESS, 69, 850, 935, 971  
 TORY, H. M., and F. H. Pitcher, Laboratory Physics, W. LE C. STEVENS, 257  
 TOSTI, G., Mosso's La Democrazia, 293  
 TOWNLEY, S. D., Comstock's Astronomy, 612  
 Travertine Falls and Reefs, J. C. BRANNER, 184  
 TRELEASE, W., St. Louis Academy of Science, 70, 693, 813, 852  
 TRUE, A. C., Association of American Agricultural Colleges, 8-3  
 Tuberculosis, British Congress of, 267  
 TUFTS, F. L. Astronomy, Physics and Chemistry at the N. Y. Academy of Science, 614, 934  
 TURNEAURE, F. E., Fuertes's Water Filtration, 573  
 Turneure, F. E., and F. H. Russell, Public Water Supplies, M. MERRIMAN, 104
- UNDERWOOD, W. L., Goldfish as Destroyers of Mosquito Larvæ, 1017  
 University and Educational News, 39, 80, 119, 160, 192, 232, 272, 304, 344, 384, 424, 464, 504, 544, 583, 623, 664, 704, 744, 783, 824, 864, 904, 943, 984, 1042  
 Upton, W., Physiological Effects of Diminished Air Pressure, 1012
- VAN HISE, C. R., Geology of Ore Deposits, 745, 785  
 VAN'T HOFF, J. H., Physical Chemistry, 126  
 VAUGHAN, T. W., Bahaman Corals, 497  
 Vibrations, Stability of, C. BARUS, 403  
 Vision, Adaptation in, E. L. THORNDIKE, 221  
 Visual Perception of Space, J. MCK. CATTELL, 263
- W., R. S., Works on Mechanics, 571 ; Gleichungen mathematischen Physik, H. Weber, 610  
 WARD, R. DEC., Current Notes on Meteorology, 33, 779, 817, 938 ; Effects of Diminished Air Pressure, 814 ; Hann's Meteorologie, 966  
 WARD, H. B., Zoology at the American Association, 625 ; American Microscopical Society, 801  
 WARDLE, H. N., Permanent Skin Decoration, 776  
 Washington Memorial Institution, W. J. MCGEE, 111 ; and a National University, J. MCK. CATTELL, 574  
 WEAD, C. K., Philosophical Society of Washington, 894, 1006  
 Weather Control, W. S. FRANKLIN, 496  
 Weber, H., Riemann's Gleichungen mathematischen Physik, R. S. W., 610  
 WELCH, W. H., Relation of Yale to Medicine, 825  
 Wernicke and Vater's Mechanik, R. S. W., 571  
 West Virginia, University of, 735  
 WHEELER, W. M., The Protozoa, G. N. Calkins, 808  
 WHIPPLE, G. C., Investigations of Illinois River, 649  
 WHITE, C. A., Varietal Mutation in the Tomato, 841 ; Senegal Baobab Tree, 937  
 'Who's Who in America,' W. J. M., 651  
 WILEY, H. W., Leffmann and Beam on Food Analysis, 769 ; Association of Official Agricultural Chemists, 997  
 Willey, A., Zoological Results, G. H. PARKER, 106  
 WILLIAMS, R. P., Teaching Chemistry in Schools, 100  
 WILLIAMS, T., Catalogue of Sci. Literature, 328  
 WILSON, E. B., Meyer's Studien über den Körperbau der Anneliden, 889  
 WILSON, H. V., Work of Beaufort Laboratory, 739  
 WINSTON, I., Charles Anthony Schott, 212  
 Wisconsin University Science Club, L. S. SMITH, 851 ; C. K. LEITH, 972  
 Wislizenus, W. F., Astronomischer Jahresbericht, G. C. COMSTOCK, 216  
 WOOD, R. W., Pseudoscopic Vision without a Pseudoscope, 184  
 WOODMAN, D., N. Y. Section of American Chemical Society, 30  
 WOODWARD, C. M., Change in Education, 474  
 WOODWARD, R. S., The Progress of Science, 305  
 WOODWORTH, R. S., Bibliotics or Study of Documents, P. Frazer, 291 ; Anthropology and Psychology at the N. Y. Acad. of Sci., 934, 971
- Yale, Chemical Laboratory, Research Papers, T. W. RICHARDS, 372 ; University, Bicentennial, 655, 700 ; Letters and Science, D. C. GILMAN, 665 ; Medicine, W. H. WELCH, 825  
 YOUNG, C. A., C. F. CHANDLER, A. HALL, JR., E. C. PICKERING, O. STONE, W. R. HARPER, Report of Board of Visitors to Naval Observatory for 1901, 877
- ZELENY, J., Physics at the American Association, 585  
 Zoological Club, University of Chicago, C. M. CHILD, 28 ; Fifth International Congress, 405  
 Zoology at the American Association, C. B. DAVENPORT, 315 ; H. B. WARD, 625  
 Zoo-Paleontology, H. F. O., 330, 498, 578, 699